

REMARKS

Claims 1 and 4 have been cancelled without prejudice to their re-introduction at such further stage of patent prosecution or in a continuation application as may be deemed necessary or desired.

Claims 2 and 5 have been re-written independent claim form. Amended claim 2 no longer recites the word "may" whereby the Examiner's objection should be withdrawn. It is pointed out for the record, however, that the deletion of "may" does not affect the claim scope. Re-written claim 5 likewise deletes the word "may" whereby the Examiner's objection thereto should be withdrawn. As with claim 2, the deletion of the superfluous word "may" does not affect claim scope.

The Markush language now presented in claims 3 and 6 is simply chemical shorthand for reciting that the amide may comprise stearic acid amide, behenic acid amide, or a mixture thereof.

Applicants respectfully submit that claims 1-6 define novel unobvious inventions over JP-46-2787A in view of Ishii '744 or JP 6-93070 or JP 57-10814 references.

The primary reference does not teach the use of hindered phenol antioxidants. Office Action, page 3.

The primary reference does not teach a combination of an amide compound of Applicants' formula (I) in combination with a hindered phenol defined by formula (II) or formula (III).

The secondary references are also seen to be deficient.

Therefore, even if the references were combined, which is not conceded, they would not have suggested the present claimed inventions.

Furthermore, even if there was a *prima facie* case of obviousness, which there isn't, it will have been rebutted based on the evidence aduced in the specification as filed. Superior

results attained with the present invention are detailed in the present specification, including the Examples. Applicants invite the Examiner to study Table 1 at page 15 for an overview. AO-1 represents an example of a hindered phenol antioxidant of the Formula (II) and AO-2 represents an example of a hindered phenol of the Formula (III). B-1 and B-2 are examples of amines of the Formula (I). The Examiner will observe that Examples 1-4 yielded good results for both degree of yellowing and coloring by heat whereas when AO-1, AO-2, B-1 or B-2 were used singly, as in the prior art, these results were not seen. The Examiner should consider in this respect Comparative Examples 1-4 in particular.

Applicants submit that the cited references neither disclose nor suggest their combination nor that the superior results reported herein would be achieved by their combination, nor specifically that the result obtains from combining the recited hindered phenol antioxidant and the defined amine.


Applicants accordingly respectfully submit that their invention would not have been obvious to a person of only ordinary skill in the art.

In re Appln. of KIMURA et al.
Application No. 09/529,717

A Notice to this effect is earnestly solicited. Otherwise, the Examiner is invited to contact the undersigned and schedule a personal interview to advance this case towards allowance.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

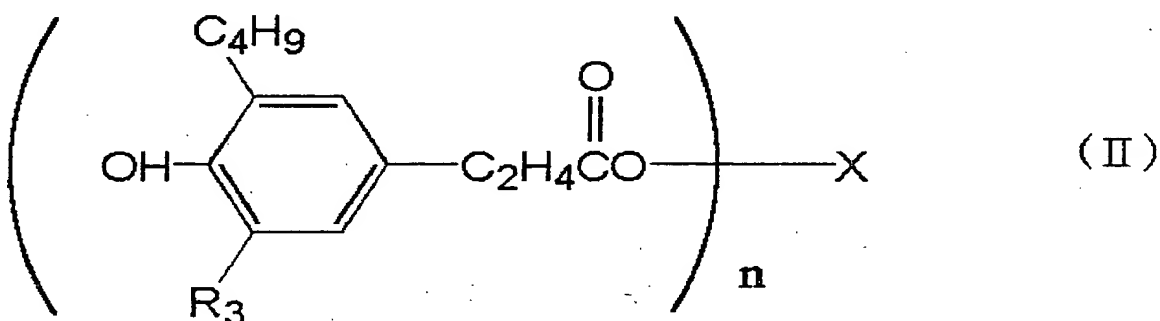
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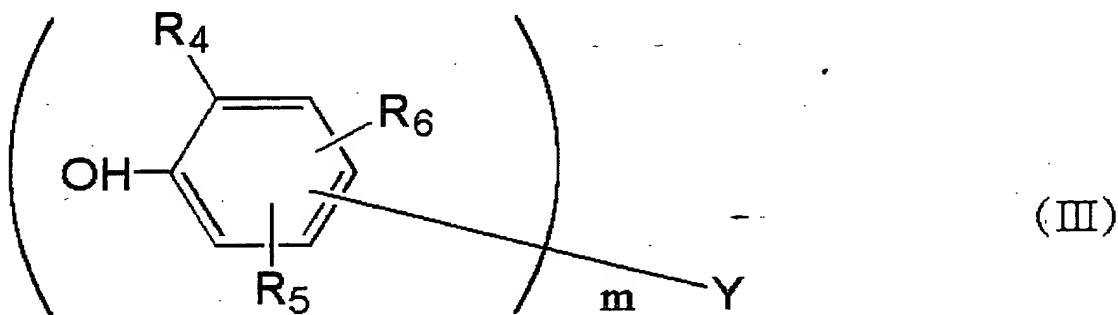
CLAIMS AS AMENDED IN RESPONSE TO THE
OFFICIAL ACTION MAILED MARCH 5, 2001

2. (Amended) ~~The composition according to claim 1, in which the~~ A polyurethane composition comprising

(a) a hindered phenol antioxidant which is at least one selected from the group of compounds represented by the following general formula (II) and (III):



wherein R₃ represents an alkyl group having 1 to 8 carbon atoms; n represents an integer of 1 to 4; and X represents an n-valent alcohol residue, having 1 to 18 carbon atoms, which may optionally contain a hetero atom and/or a cyclic group,



wherein R_4 represents an alkyl group having 1 to 8 carbon atoms; R_5 and R_6 independently represent a hydrogen atom or an alkyl group, having 1 to 18 carbon atoms, which ~~may~~ optionally contains a hetero atom; m represents an integer of 1 to 3; Y represents an m -valent group, and when m is 1, it represents a hydrogen atom or an alkyl group, having 1 to 18 carbon atoms, which ~~may~~ optionally contains a hetero atom, when m is 2, it represents a sulfur atom, an oxygen atom or an alkylidene group having 1 to 4 carbon atoms, and when m is 3, it represents an isocyanuric acid- N,N',N'' -trimethylene group or a 1,3,5-trimethylbenzene-2,4,6-trimethylene group, and

(b) an amide represented by the following general formula (I):



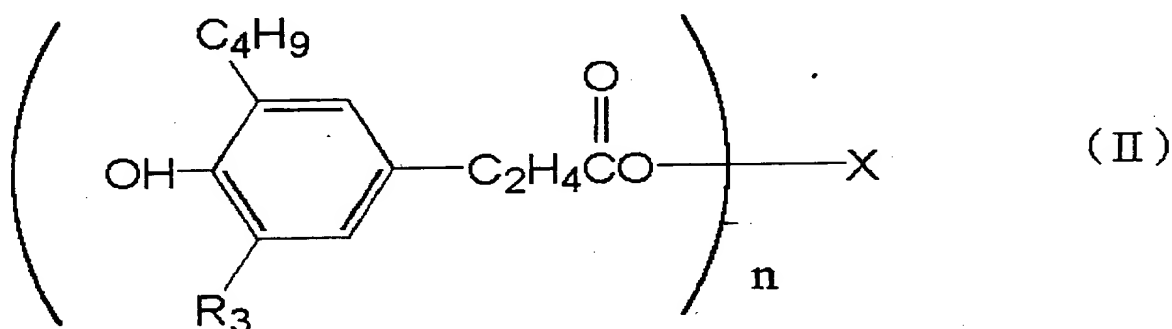
wherein R_1 represents an alkyl group having 12 to 21 carbon atoms, wherein (a) and (b) are compounded in a polyurethane.

3. (Amended) The composition according to claim ~~1 or 2, in which~~ wherein the amide is at least one selected from the group consisting of stearic acid amid and behenic acid amide.

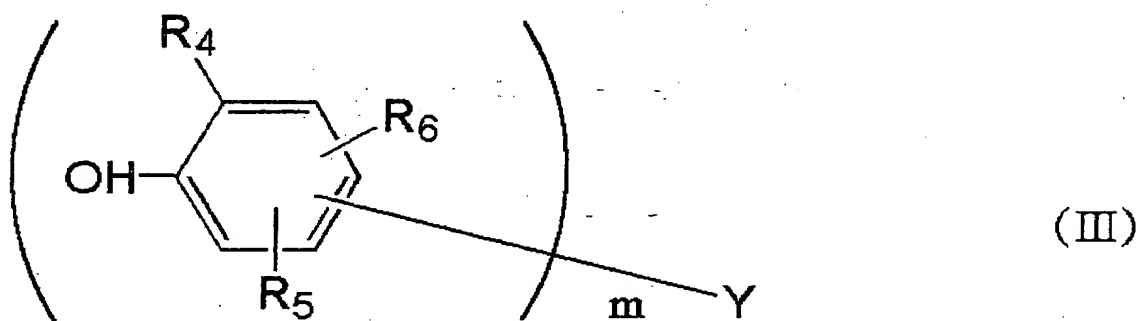
5. (Amended) ~~The composition according to claim 1, in which the~~ A process for preventing discoloring or coloring of a polyurethane comprising:

compounding:

(a) a hindered phenol antioxidant which is at least one selected from the group of compounds represented by the following general formula (II) and (III):

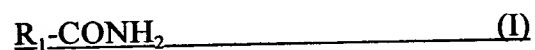


wherein R_3 represents an alkyl group having 1 to 8 carbon atoms; n represents an integer of 1 to 4; and X represents an n -valent alcohol residue, having 1 to 18 carbon atoms, which may optionally contain a hetero atom and/or a cyclic group,



wherein R_4 represents an alkyl group having 1 to 8 carbon atoms; R_5 and R_6 independently represent a hydrogen atom or an alkyl group, having 1 to 18 carbon atoms, which may optionally contain a hetero atom; m represents an integer of 1 to 3; Y represents an m -valent group, and when m is 1, it represents a hydrogen atom or an alkyl group, having 1 to 18 carbon atoms, which may optionally contain a hetero atom, when m is 2, it represents a sulfur atom, an oxygen atom or an alkylidene group having 1 to 4 carbon atoms, and when m is 3, it represents an isocyanuric acid- N,N,N' -trimethylene group or a 1,3,5-trimethylbenzene-2,4,6-trimethylene group, and

(b) an amide represented by the following general formula (I):



wherein R₁ represents an alkyl group having 12 to 21 carbon atoms in a polyurethane.

6. (Amended) The process according to claim 4 or 5, ~~in which the~~ wherein the amide is at least one selected from the group consisting of stearic acid amide and behenic acid amid.